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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,179	02/25/2005	Ralf Widera	520.1045	4000
69713 7590 06/27/2007 OCCHIUTI ROHLICEK & TSAO, LLP 10 FAWCETT STREET CAMBRIDGE, MA 02138			EXAMINER LIN, WEN TAI	
			ART UNIT 2154	PAPER NUMBER
			MAIL DATE 06/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/507,179

Applicant(s)

WIDERA ET AL.

Examiner

Wen-Tai Lin

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/14/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-27 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-27 and 29-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 13-27 and 29-32 are presented for examination. Claim 28 has been canceled.

#### ***Claim Rejections - 35 USC § 103***

2. Claims 13-15, 17-20, 22-23, 25, 27 and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Elleson et al.[U.S. Pat. No. 6459682] in view of Farrell et al.(hereafter "Farrell")[EP 1039691].

3. As to claims 13 and 17, Elleson teaches the invention substantially as claimed including: a method for transmitting measured information from a measuring computer to a control computer of a measuring system, the measuring computer and the control computer being interconnected via a telecommunications network [e.g., Abstract], the method comprising:

combining measured data into characteristic values having a lower volume than the measured data; and transmitting the characteristic values from the measuring computer to the control computer [e.g., col.3 lines 8-20; col. 7, lines 1-15; note that it is inherent that Elleson's statistical data is obtained from measured traffic data having lower volume than the raw data].

Elleson teaches that in situations when there is traffic congestion, edge devices may restrict traffic flowing certain region of the network based on the collected statistical data [e.g., claims 3 and 14; col. 5, lines 55-62]. Elleson does not specifically teach associating the characteristic values with a time of the combining.

However, Farrell teaches time-stamping collected traffic record for purpose of differentiating events [e.g., paragraph 70]. Furthermore, time-stamping a data record is a popular way of associating the data with certain related events along the time line. It would have been obvious to one of ordinary skill in the art at the time the invention was made to also associate time information in Elleson's collected statistics because it makes Elleson's traffic prediction/regulation more accurate.

4. As to claim 14, Elleson further teaches that the telecommunications network includes at least one of an internet and an intranet [e.g., Fig. 1B, wherein A1, A2 are premise networks (or intranet) and E1, E2 are situated in the Internet environment (col.1 lines 8-12)].

5. As to claim 15, Elleson further teaches that the measured data includes a plurality of measurement parameters, and wherein the combining is performed according to the respective measurement parameters [col.6 lines 3-15].

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6. As to claim 18, Ellesson further teaches that the method comprises determining a time interval for combining the measured data as a function of a measuring method [e.g., col.12 lines 40-56].

7. As to claim 19, Ellesson further teaches that the measuring system includes a second measuring computer [e.g., an egress device] and wherein measurement packets are transmitted between the measuring computer [e.g., an ingress device] and the second measuring computer [col.5 line 66 –col. 6 line 2; note that the edge devices include ingress and egress devices, wherein traffic flows from the ingress device to the egress device (see Figs. 1A and 1B)].

8. As to claim 20, Ellesson does not specifically teach that the measurement packets include User Datagram Protocol (UDP) measurement packets.

However, UDP is a well known data transfer protocol mostly used in application area which is less sensitive to packet loss. For example Farrell teaches that UDP is one of the protocols used for reporting traffic state [e.g., paragraph 143].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use UDP in Ellesson's system because statistical information tends to be less sensitive to packet loss in a environment where network traffic does not experience drastic changes.

9. As to claim 22, Ellesson further teaches that the measured data includes unidirectional transmission characteristics [note that the measured data include traffic flowing from ingress to egress devices].

10. As to claim 23, Ellesson further teaches that the combining and transmitting are performed using the measuring computer, and wherein the measuring computer functions as a receiver and the second measuring computer functions as a sender [Abstract; col.5 lines 63-65; note that both the egress and ingress, or intermediate, devices function as receiver receiving traffic data and function as a sender sending the statistical data (to the directory server)].

11. As to claims 25-27 and 29-31, since the features of these claims can also be found in claims 13-15, 17, 19 and 22-23, they are rejected for the same reasons set forth in the rejection of claims 13-15, 17, 19 and 22-23 above.

12. Claims 16, 21, 24, 26 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellesson et al.(hereafter "Ellesson")[U.S. Pat. No. 6459682], as applied to claims 13-15, 17-19, 22-23, 25, 27 and 29-31 above.

13. As to claim 16, Ellesson further teaches that the characteristic (i.e., the statistics) of the traffic flow is probed periodically [col. 7, lines 1-6].

Ellesson does not specifically teach that the characteristic values include at least one of a minimum, a mean value, a maximum, and a standard deviation of the measured data over a time interval.

However, statistical data constituting at least one of a minimum, a mean value, a maximum, and a standard deviation of the measured data is well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Ellesson's traffic statistic include at least a minimum, a mean value, a maximum, and a standard deviation of the measured data because it is well known that the nature of network traffic is rather stochastic and it only makes sense to characterize the fluctuating data with statistical values such as mean value or standard deviation, etc.

14. As to claim 21, Ellesson further teaches that the characteristic values include statistics of packet loss, which is obtained periodically [col. 6 lines 3-15].

Ellesson does not specifically teach that the characteristic values include a sum of all packets lost and a maximum of all successively occurring packet losses, and further comprising determining the sum of all packets lost and the maximum of all successively occurring packet losses during a detection of measurement packet losses in a time interval.

However, finding the sum of all packets lost and a maximum of all successively occurring packet losses in a successively operating period is well known statistics that can be obtained from measured traffic data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to obtain the aforementioned data as part of the statistical values reportable to Ellesson's directory server because the information is useful for characterizing a SLA (Service Level Agreement) [col.1 line 49 – col.2 line 12].

15. As to claim 24, Ellesson further teaches that the characteristic values include statistics of one-way packet delay, loss, throughput, and response time etc. [see the architecture of Figs. 1A-1B; col.1 lines 49-55; col.6 lines 3-15].

Ellesson does not specifically teach the characteristic values include a mean one-way delay, a maximum one-way delay, and minimum one-way delay, a standard deviation of a one-way delay, a mean IP delay variation, a maximum IP delay variation, a standard deviation of an IP delay variation, a packet loss, and a packet throughput.

16. However, statistical information as listed is well known and has been used for characterizing the performance of a network. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the aforementioned items in Ellesson's statistics because these are useful parameters for deciding if the network performs as expected in the SLA.

17. As to claims 26 and 32, since the features of this claim can also be found in claims 13, 16, 19-20, 22-24 and 29, it is rejected for the same reasons set forth in the rejection of claims 13, 16, 19-20, 22-24 and 29 above.



18. Applicant's arguments filed on 5/14/2007 for claims 13-27 and 29-32 have been fully considered but they are not deemed to be persuasive.

Specifically, Applicant argues that Farrell's time-stamp is used for indication of a time when a data record was generated; it has nothing to do with a time of a combining of the measured values into characteristic values.

19. The examiner respectfully disagrees: Time-stamping a data record, whether it is a raw measured data or a further processed statistical data, is rather popular in the art. Farrell is only cited for the idea of time-stamping; In the example Farrell only time-stamps the measured data because it does not generate statistical data out of the measured data. The point is, an ordinary skilled artisan in view of Ellesson's teachings would have time-stamped the combined statistical data because this is the data that is transmitted and used by the central server; the original volumetric data has lost its originality in time because of the reduced data volume after processing. Furthermore, even if a skilled artisan choose to maintain one time-stamp associated with a piece of measure data and keeps it as a time reference for the generated statistical data, the time-stamp is still maps to "a time of the combining" in the claim language.

For at least the above reasonings, it is submitted that the prior art of record reads on the claims.

20. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

21. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday(8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 for official communications; and

(571) 273-3969 for status inquires draft communication.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

June 12, 2007

Wen-Tai Lin  
6/12/07